

AMENDMENTS TO THE CLAIMS

1. (Original) A method of controlling a pile loom provided with means for calculating a pile scale factor based on a ratio between consumption of a ground warp and consumption of a pile warp during pile weaving, said method comprising the steps of:

setting a tolerance relative to the pile scale factor; and

correcting at least one weaving condition parameter associated with a weight of a pile in a direction to return the pile scale factor to a value within the tolerance, when a calculated pile scale factor deviates from the tolerance.

2. (Original) A method of controlling a pile loom provided with means for calculating consumption of a pile warp per unit of period during pile weaving, said method comprising the steps of:

setting a tolerance relative to a pile scale factor; and

correcting at least one weaving condition parameter associated with a weight of a pile in a direction to return the consumption of the pile warp to a value within the tolerance, when a calculated consumption of the pile warp deviates from the set tolerance.

3. (Original) The method of controlling a pile loom 1 according to Claim 1, the tolerance is set considering a standard of the pile fabric.

4. (Currently Amended) The method of controlling a pile loom 1 according to Claim 1 ~~or~~ 2, wherein the weaving condition parameters includes a weft density of a pile fabric, and when either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the amount of revolution of a take-up roll is corrected to change the weft density.

5. (Currently Amended) The method of controlling a pile loom according to Claim 1 ~~or~~ 2, wherein the pile loom includes a ground warp let-off control device for controlling the number of revolution of a ground warp let-off beam in a direction to cancel the deviation between a target

ground warp tension and a tension of the ground warp, and the weaving condition parameter includes the target ground warp tension of the ground warp to be set, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the target ground warp tension of the ground warp is changed.

6. (Currently Amended) The method of controlling a pile loom according to Claim 1 ~~or~~ 2, wherein the pile loom includes a ground warp let-off control device for controlling the number of revolution of a ground warp let-off beam in a direction to cancel the deviation between a target ground warp tension and a tension of the ground warp, and the weaving condition parameters include the target ground warp tension of the ground warp to be set and a weft density, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the target tension of the ground warp is changed, and the number of revolution of a take-up roll is corrected, thereby changing the weft density of the pile fabric.

7. (Currently Amended) The method of controlling a pile loom according to Claim 1 ~~or~~ 2, wherein the pile loom includes a tension roll swingably provided thereon and around which the pile warp is extended and a pile tension controller for urging the tension roll via an electric actuator for generating torque corresponding to a previously set urging force, and the weaving condition parameters include the urging force to be set for urging the tension roll, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the urging force of the tension roll is corrected.

8. (Currently Amended) The method of controlling a pile loom 1 according to Claim 1 ~~or~~ 2, wherein the pile loom includes a tension roll swingably provided thereon and around which the pile warp is extended and a pile tension controller for executing a positional control over a timing period which is set within a period when a relative movement between the reed and the pile fabric for pile weaving and executing torque driving corresponding to the tension which is set during a period other than this period, and the weaving condition parameters include at least either a

positional control start timing or a positional control end timing, respectively set, for executing the positional control, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, either the positional control start timing or the positional control end timing is corrected.

9. (Currently Amended) The method of controlling a pile loom 1 according to ~~Claim 1 or 2~~, wherein the pile loom includes a let-off beam of the pile warp which is rotatably driven at a speed corresponding to the rotation of a take-up roll, and the weaving condition parameters include the revolution speed of the let-off beam of the pile warp, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the revolution speed of the let-off beam of the pile warp is corrected.

10. (Currently Amended) The method of controlling a pile loom 1 according to ~~any of Claims Claim 1 to 9~~, wherein the amount of correction of the weaving condition parameters is determined in response to a magnitude relation corresponding to a threshold of the tolerance.

11. (Currently Amended) The method of controlling a pile loom 1 according to ~~any of Claims Claim 1 to 9~~, wherein the amount of correction of the weaving condition parameters is determined in response to the amount of deviation of the pile scale factor corresponding to the threshold of the tolerance.

12. (Currently Amended) The method of controlling a pile loom 1 according to ~~Claim 7, 8 or 9~~, further comprising warning ranges set beyond the tolerance, wherein a warning signal is outputted when the calculated pile scale factor deviates from the warning ranges.

13. (New) The method of controlling a pile loom 1 according to Claim 2, wherein the weaving condition parameters includes a weft density of a pile fabric, and when either the calculated

pile scale factor or consumption of the pile warp deviates from the tolerance, the amount of revolution of a take-up roll is corrected to change the weft density.

14. (New) The method of controlling a pile loom according to Claim 2, wherein the pile loom includes a ground warp let-off control device for controlling the number of revolution of a ground warp let-off beam in a direction to cancel the deviation between a target ground warp tension and a tension of the ground warp, and the weaving condition parameter includes the target ground warp tension of the ground warp to be set, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the target ground warp tension of the ground warp is changed.

15. (New) The method of controlling a pile loom according to Claim 2, wherein the pile loom includes a ground warp let-off control device for controlling the number of revolution of a ground warp let-off beam in a direction to cancel the deviation between a target ground warp tension and a tension of the ground warp, and the weaving condition parameters include the target ground warp tension of the ground warp to be set and a weft density, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the target tension of the ground warp is changed, and the number of revolution of a take-up roll is corrected, thereby changing the weft density of the pile fabric.

16. (New) The method of controlling a pile loom according to Claim 2, wherein the pile loom includes a tension roll swingably provided thereon and around which the pile warp is extended and a pile tension controller for urging the tension roll via an electric actuator for generating torque corresponding to a previously set urging force, and the weaving condition parameters include the urging force to be set for urging the tension roll, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the urging force of the tension roll is corrected.

17. (New) The method of controlling a pile loom 1 according to Claim 2, wherein the pile loom includes a tension roll swingably provided thereon and around which the pile warp is extended and a pile tension controller for executing a positional control over a timing period which is set within a period when a relative movement between the reed and the pile fabric for pile weaving and executing torque driving corresponding to the tension which is set during a period other than this period, and the weaving condition parameters include at least either a positional control start timing or a positional control end timing, respectively set, for executing the positional control, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, either the positional control start timing or the positional control end timing is corrected.

18. (New) The method of controlling a pile loom 1 according to Claim 2, wherein the pile loom includes a let-off beam of the pile warp which is rotatably driven at a speed corresponding to the rotation of a take-up roll, and the weaving condition parameters include the revolution speed of the let-off beam of the pile warp, wherein if either the calculated pile scale factor or consumption of the pile warp deviates from the tolerance, the revolution speed of the let-off beam of the pile warp is corrected.

19. (New) The method of controlling a pile loom 1 according to Claim 2, wherein the amount of correction of the weaving condition parameters is determined in response to a magnitude relation corresponding to a threshold of the tolerance.

20. (New) The method of controlling a pile loom 1 according to Claim 2, wherein the amount of correction of the weaving condition parameters is determined in response to the amount of deviation of the pile scale factor corresponding to the threshold of the tolerance.

21. (New) The method of controlling a pile loom 1 according to Claim 8, further comprising warning ranges set beyond the tolerance, wherein a warning signal is outputted when the calculated pile scale factor deviates from the warning ranges.

22. (New) The method of controlling a pile loom 1 according to Claim 9, further comprising warning ranges set beyond the tolerance, wherein a warning signal is outputted when the calculated pile scale factor deviates from the warning ranges.